

Evaluating Memory and Thinking Problems: What to Expect

Your doctor will likely take multiple steps in order to evaluate your memory and thinking. The evaluation may be divided into several visits, allowing time to gather information to accurately determine the cause of your concerns and rule out other possibilities. Understanding the type and purpose of the tests your doctor(s) may order and knowing what to expect during an evaluation can be empowering and help to ease anxiety.

Medical history and physical exam



To obtain information to assist with diagnosis, your doctor may:

- Ask you about your past and current medical problems and concerns.
- Review all of the medications you currently take, as well as those you took in the past.
- Ask you about your diet and use of alcohol.
- Ask you about medical conditions present in your family.

With your permission, the doctor may also talk to your family members to gain additional insight that can help with reaching a diagnosis.

During a physical exam, your doctor may:

- Check your blood pressure, temperature and pulse.
- Listen to your heart.
- Perform other procedures to assess your overall health.

Lab tests



The doctor may order various lab tests to assist in detecting potential causes for your symptoms.

- **Bloodwork.** Your doctor may order bloodwork to check for a thyroid hormone or vitamin deficiency, to rule out infection or to check how organs such as your liver and kidneys are functioning.
- **Urinalysis.** The doctor may request a urine sample to screen for infection and assess kidney function.
- **Cerebrospinal fluid (CSF) analysis.** In some cases where additional information is needed, the doctor may order an analysis of proteins in CSF. During this procedure, a sample of CSF is collected via a spinal tap.

Mental health and cognitive status tests

Depression screening. Your doctor may ask you questions to determine if you have symptoms of depression, because depression can cause memory and thinking problems.



Mental cognitive status tests. These tests are used to evaluate your memory, your problem-solving skills and other thinking skills.

- Some tests are very brief. For example, you may be asked about the date and time, asked to remember a short list of words or asked to do simple math calculations. Other tests can involve more time and complex problem solving.
- Some doctors may ask you to participate in a more comprehensive evaluation known as a neuropsychological exam, which uses multiple tests and evaluates many cognitive areas, including executive function, judgment, attention and language.

Brain imaging

Imaging technology is used to evaluate the structure and function of the brain.



- **Computed tomography (CT)** and **magnetic resonance imaging (MRI)** scans are used to see the structure of the brain. These scans can show brain shrinkage. They can also rule out conditions that may cause symptoms similar to Alzheimer's disease, but that require different treatment (such as a brain tumor, aneurysm, bleeding in the brain, nerve injury, stroke or the buildup of fluid in the brain). An MRI scan yields higher-resolution images and usually takes a bit longer than a CT scan. Your doctor may order an MRI scan to provide more information about an abnormality seen on a CT scan.
- **Positron emission tomography (PET)** and **single photon emission computed topography (SPECT)** scans are used to evaluate brain function. In both, a radioactive tracer (radiopharmaceutical) is injected into the bloodstream. Analyzing the movement of the tracer helps the doctor to evaluate functions such as blood flow through the brain or the brain's use of glucose.